

**FINAL FINDING OF NO SIGNIFICANT IMPACT**  
**ENVIRONMENTAL ASSESSMENT FOR THE HARBOR ACTIVITIES ASSOCIATED WITH**  
**THE DELTA IV PROGRAM AT VANDENBERG AIR FORCE BASE**

This Environmental Assessment (EA) evaluates the potential environmental impacts of actions to allow use of the Vandenberg Air Force Base (VAFB) harbor and associated facilities to support The Boeing Company's (Boeing's) portion of the Evolved Expendable Launch Vehicle (EELV) program. The Air Force has prepared this EA in compliance with the National Environmental Policy Act (NEPA), Air Force Instruction (AFI) 32-7061, and other applicable regulations, as a tiered document building on the Final Environmental Impact Statement (EIS) and Supplemental EIS prepared by the Air Force in 1998 and 2000, respectively.

**PURPOSE AND NEED**

The proposed activities are necessary for the implementation of the EELV program at VAFB. As part of this program, Boeing proposes to transport the Common Booster Cores (CBCs) for their new Delta IV rocket to VAFB on the custom-designed vessel, the Delta Mariner. To allow the Delta Mariner to use the harbor, it must be dredged and the mooring dolphins refurbished. To maximize the efficient use of the dock and minimize the duration of ship calls, the dock needs to be modified and a CBC staging and elevated platform transporter (EPT) turnaround area needs to be constructed.

**DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES**

The six proposed elements evaluated in this EA include: 1) dredging the VAFB harbor, 2) storing dredged material at a temporary staging location, 3) modifying the dock, 4) refurbishing and upgrading the mooring dolphins, 5) constructing the EPT turnaround area, and 6) operating the Delta Mariner.

Approximately 15,000 cubic yards of the sediment will require removal over a five-week period to return the harbor to its previous dredged depth. The dredged sediments will be dewatered on the dock, and then moved to a temporary storage location approximately 1,300 feet west of the dock prior to use at SLC-6 for construction fill. Periodic maintenance dredging will be required every two to three years to maintain the required harbor depths.

The dock and dolphins will be modified and refurbished by installing a gently sloping ramp into the seaward 10 feet of the dock, re-installing six floodlights, and repairing or replacing deteriorated equipment on each dolphin. A 60-foot by 450-foot CBC staging and EPT turnaround area will be constructed approximately 1,000 feet west of the harbor dock. The Delta Mariner will make up to six ship calls per year at VAFB, with each call lasting 24 to 48 hours.

Two project alternatives were identified: the use of a suction dredge, and loading/unloading the vessel only during daylight hours. In addition, the no action alternative was evaluated for each of the six actions.

**REGULATORY BACKGROUND**

Pursuant to NEPA, the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 CFR 1500-1508), Department of Defense Directive 6050.1, and AFI 32-7061, which

describes the procedures for the Air Force environmental impact analysis process, the Air Force has prepared this EA to evaluate potential environmental consequences of the proposed actions and alternatives.

## **SUMMARY OF THE ANTICIPATED ENVIRONMENTAL IMPACTS**

This EA identified potential impacts for air quality, water resources, biological resources, cultural resources, and hazardous materials. None of the other issue areas were significantly impacted.

**Land Use:** Dredging activities and dock modifications will require that the harbor and dock area be closed to recreational visitors for the approximately eight weeks that these activities will occur. Closure of the harbor for ship calls will occur up to six times per year for up to three days at a time. The site has no public access through VAFB, so closure of the harbor will not be a significant impact.

Construction of the EPT turnaround area will permanently remove approximately ½ acre from grazing use, while use of the temporary sediment storage area will remove roughly 4½ acres from cattle grazing for up to six months. After the sediments have been completely removed from the temporary sediment storage area, the site will be revegetated with plants characteristic of the area prior to construction. Because there are 23,000 acres of VAFB used for grazing, most of which are on South VAFB, and because most of the effects will be short-term, the impacts will not be significant.

**Air Quality:** Exhaust emissions associated with the Proposed Action were evaluated as part of an overall Conformity Analysis included in the SEIS for the EELV program. The Conformity Analysis did not include impacts related to the generation of PM<sub>10</sub> from grading or sediment handling, so that analysis was included in the EA. PM<sub>10</sub> emissions could occur from dry sediments during high winds or during sediment handling. Standard construction practices, including the application of a binding agent for dust control, will minimize PM<sub>10</sub> emissions to an insignificant level.

**Water Resources:** During dredging, sediments will be excavated and some will escape from the dredge bucket. Since the sediments are primarily sand, released sediments will settle quickly to the bottom and produce little turbidity. However, to protect reef habitats adjacent to the breakwater, a turbidity curtain will be placed around the dredge and/or between the dredge and the breakwater. To minimize turbidity from demolition debris falling into the harbor, a turbidity curtain also will be placed in front of the dock during modifications.

A silt fence located on the downslope side of the temporary sediment staging area and EPT turnaround site will prevent sediments from reaching the harbor. Refueling and normal maintenance of the barge-mounted crane used for dredging or dolphin repair will occur. Boeing will implement standard spill control measures outlined in their spill prevention plan when vessels or heavy equipment are in the harbor to minimize spill risk to an insignificant level.

**Noise:** No sensitive human receptors live within a mile of the project area and it is not open to the public. Access to the construction area will be limited to authorized personnel and noise from heavy equipment will be kept within limits required by the Occupational Safety and Health Administration to protect site workers. Impacts from noise will therefore be insignificant.

**Biological Resources:** Dredging will remove the benthic infauna associated with the sediments. However, impacts to this local community will be minimal and short-term since the animals living in these sediments are active, mobile and well adapted to the dynamic sandy

environment. Recruitment back into the area after dredging should occur within several months of dredging. Dredging will remove up to 0.2 acres of kelp growing in the harbor displacing the fish associated with the kelp. However, since abundant kelp is close by, fish in the harbor, including those for which a Fisheries Management Plan has been prepared, will not be significantly impacted. In addition, the loss of kelp from the dredge footprint will be mitigated through the implementation of a kelp mitigation program.

Pacific harbor seals periodically haul out on the beach west of the harbor and the federally threatened southern sea otter make occasional use of the harbor. The federally endangered California brown pelican and a wide variety of other marine birds may use areas around the harbor for resting and/or foraging. Project noise and activity levels during construction will cause these and other noise-sensitive wildlife to leave the area. However, these impacts will be short-term and insignificant, since wildlife will return to the project areas once construction ceases. A monitor will observe the seals and activities will be curtailed if seals on the adjacent rocks are affected.

The burrowing owl, a federal Species of Concern, may be a rare visitor to the sediment storage or EPT turnaround areas, although it has not nested in this area for over a decade. A pre-construction survey will be performed; if burrowing owls are identified, mitigation measures will be implemented such as hand excavation of vacant burrows and avoidance of construction during breeding.

To mitigate for temporary impacts at the temporary sediment storage area, the site will be revegetated using plants currently growing in this area in accordance with a site-specific revegetation plan. Nighttime lighting at the harbor area and EPT turnaround area will be limited to one or two nights for up to six times per year. Some nocturnal animals may avoid the site during these times, but impacts will be temporary and insignificant.

**Cultural Resources:** A previous underwater study of the harbor identified no underwater cultural resources, and recommended no additional studies. The harbor was subsequently excavated to below bedrock and later redredged. Thus, the proposed dredging will not impact submerged cultural resources. Archaeological site CA-SBA-1542, eligible for listing on the NRHP, is within the footprint of the proposed EPT turnaround and near the temporary sediment staging area. The project is not expected to impact any portion of the site that makes it eligible for NRHP listing. The California State Historic Preservation Officer has concurred with this determination under their obligations for the NHPA Section 106 process. VAFB will continue to comply with its NHPA obligations.

The lights surrounding the turnaround area, as well as the paved area itself, will be visible within the Anza Trail historic viewshed, although the Anza Trail itself will not be impacted. To minimize the visual impacts, the light poles will be a neutral color to blend in with the surrounding natural environment. With this mitigation, the impacts to the viewshed will not be significant.

**Transportation:** There will be no substantial increase in traffic associated with the project.

**Hazardous Materials and Hazardous Wastes:** No hazardous materials are anticipated to be brought to the harbor area during construction, with the exception of diesel fuel to re-supply the dredge or other heavy equipment. Standard safety procedures will be used to minimize the potential for fuel spills. In addition, spill cleanup materials will be maintained on site to deal with a possible fuel spill.

Wastes generated from the construction activities will consist primarily of construction debris. Tests performed on the harbor sediments indicate that the material is not hazardous and that there are no environmental restrictions on using the sediment as fill. Vessel operations activities will not bring in hazardous materials into the harbor. The Delta Mariner will transport CBCs to VAFB, but the CBCs' storage tanks will be empty during transport. Ordnance will be attached to the CBCs, but the ordnance will not be armed. No refueling of the ship will occur at VAFB.

**Geology and Soils:** There are no unique geologic features or geologic features of unique scientific value in the harbor. As a result, the project will cause no significant geologic impacts.

**Utilities:** The six harbor-related elements of the Proposed Action are expected to create insignificant demand increases for some utilities during the short duration of the actions.

**Health and Safety:** Construction contractors will be required to comply with OSHA, California OSHA, and other recognized construction safety standards. This will avoid risks to public health and safety.

**Environmental Justice:** Because the project impacts are isolated from the general public, there will be no impact to Environmental Justice.

**Alternative Dredging Method:** Impacts would be comparable for the proposed bucket dredge and the alternate suction dredge methods, although the use of the suction dredge may lead to more turbidity in the harbor.

**Limited Operational Schedule:** Impacts from vessel unloading only during daylight hours would be reduced for nocturnal animals. However, when the ship is in the harbor and there are CBCs staged at the staging areas, lights will be maintained for safety and security and local biota will avoid the area.

**No Action Alternative:** Under the no action alternative the harbor would not be used. Impacts discussed in the EA would not occur, although the EELV program would not occur as described in the FEIS.

## **FINDINGS AND CONCLUSION**

Following a review of the EA, I find that the proposed dredging of the harbor, installation of a temporary sediment staging area, modification of the dock, refurbishing/upgrading the mooring dolphins, construction of the EPT turnaround area, and vessel operations within the harbor will not result in significant environmental impacts. Based upon the information contained within this assessment, a Finding of No Significant Impact is made. The preparation of an environmental impact statement is not required for this action. This EA for the proposed action is on file at:

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Attn: Environmental Coordinator